Assembling and Maintaining Elliptical Fitness Crosstrainers™

EFX® 883 • EFX® 833

PRECOR®

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Edition Information

ASSEMBLING AND MAINTAINING ELLIPTICAL FITNESS CROSSTRAINERS: EFX 883 / 833

P/N 300712-301 rev F

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Important Safety Instructions

Read the following precautions thoroughly before you begin assembly, and save them afterward for future reference.

Safety Precautions

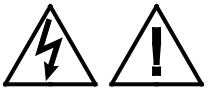
Always follow basic safety precautions when using this equipment to reduce the chance of injury, fire, or damage. Other sections in this manual provide more details of safety features. Be sure to read these sections and observe all safety notices. These precautions include the following:

- Read all instructions in this guide before installing and using the equipment and follow any labels on the equipment.
- Make sure all users see a physician for a complete physical examination before they begin any fitness program.
- *Il est conseillé de subir un examen médical complet avant d'entreprendre tout programme d'exercise. Si vous avez des étourdissements ou des faiblesses, arrêtez les exercices immédiatement.*
- Do not allow children, or people unfamiliar with the operation of this equipment, on or near it. Do not leave children unsupervised around the equipment.
- Make sure all users wear proper exercise clothing and shoes for their workouts and avoid loose or dangling clothing. Users should not wear shoes with heels or leather soles, and they should check the soles of their shoes to remove any dirt and embedded stones. They should also tie long hair back.
- Never leave the equipment unattended when it is plugged in. Unplug the equipment from its power source when it is not in use, before cleaning it, and before providing authorized service.

  Note: The optional power adapter is considered a power source for self-powered equipment.

- Use the power adapter provided with the equipment. Plug the power adapter into an appropriate, grounded power outlet as marked on the equipment.
- Care should be taken when mounting or dismounting the equipment.
- Read, understand, and test the emergency stop procedures before use.
- Keep the power cord or optional power adapter and plug away from heated surfaces.
- Route power cables so that they are not walked on, pinched, or damaged by items placed upon or against them, including the equipment itself.
- Ensure the equipment has adequate ventilation. Do not place anything on top of or over the equipment. Do not use on a cushioned surface that could block the ventilation opening.
- Assemble and operate the equipment on a solid, level surface.
- Proper Location for Equipment
    - For all equipment other than treadmills: Locate at least 40 inches (1 meter) away from walls or furniture on either side of the equipment, and 40 inches (1 meter) away from objects behind the equipment.
    - For treadmills: Locate at least 40 inches (1 meter) away from walls or furniture on either side of the treadmill, and at least 80 inches (2 meters) away from objects behind the treadmill.
- Keep equipment away from water and moisture. Avoid dropping anything on or spilling anything inside the equipment to prevent electric shock or damage to the electronics.
- Do not operate electrically powered equipment in damp or wet locations.
- Never operate this equipment if it has a damaged cord or plug, if it is not working properly, or if it has been dropped, damaged, or exposed to water. Call for service immediately if any of these conditions exist.
- Maintain the equipment to keep it in good working condition, as described in the *Maintenance* section of the assembly and maintenance guide. Inspect the equipment for incorrect, worn, or loose components, and then correct, replace or tighten prior to use.

- If you plan to move the equipment, obtain help and use proper lifting techniques. Refer to the "Moving the Equipment" section of the assembly and maintenance guide.
- Use the equipment only for its intended purpose as described in this manual. Do not use accessory attachments that are not recommended by Precor. Such attachments may cause injuries.
- Do not operate the equipment where aerosol (spray) products are being used or where oxygen is being administered.
- Do not use outdoors.
- Do not attempt to service the equipment yourself, except to follow the maintenance instructions in this manual.
- Never drop or insert objects into any opening. Keep hands away from moving parts.
- Do not set anything on the stationary handrails, handlebars, control console, or covers. Place liquids, magazines, and books in the appropriate receptacles.
- Do not lean on or pull on the console at any time.



CAUTION: DO NOT remove the cover, or you may risk injury due to electric shock. Read the assembly and maintenance guide before operating. There are no user-serviceable parts inside. Contact Customer Support if the equipment needs servicing. For use with single phase AC supply only.

Educating Users

Take time to educate users about the Important Safety Instructions found in both the *User Reference Manual* and *Product Owner's Manual*. Explain to your club or facility patrons that they should observe the following precautions:

- Hold onto a stationary handrail or handlebar while assuming the starting position on the equipment.
- Face the console at all times.
- Hold on to a stationary handrail or handlebar with one hand whenever you operate the console keys with the other hand.

Hazardous Materials and Proper Disposal

The batteries within self-powered equipment contain materials that are considered hazardous to the environment. Federal law requires proper disposal of these batteries.

If you plan to dispose of your equipment, contact Precor Commercial Products Customer Support for information regarding battery removal. Refer to *Obtaining Service*.

Product Recycling and Disposal

This equipment must be recycled or discarded according to applicable local and national regulations.

Product labels, in accordance with European Directive 2002/96/EC concerning waste electrical and electronic equipment (WEEE), determine the framework for the return and recycling of used equipment as applicable throughout the European Union. The WEEE label indicates that the product is not to be thrown away, but rather reclaimed upon end of life per this Directive.

In accordance with the European WEEE Directive, electrical and electronic equipment (EEE) is to be collected separately and to be reused, recycled, or recovered at end of life. Users of EEE with the WEEE label per Annex IV of the WEEE Directive must not dispose of end of life EEE as unsorted municipal waste, but use the collection framework available to customers for the return, recycling, and recovery of WEEE. Customer participation is important to minimize any potential effects of EEE on the environment and human health due to the potential presence of hazardous substances in EEE. For proper collection and treatment, refer to *Obtaining Service*.

Regulatory Notices for the RFID Module

When equipped with a control console as described in this document, this equipment may include a radio-frequency identification (RFID) module. The RFID module has been certified to operate at temperatures between -20ºC and 85°C (-4°F and 185°F).

Radio Frequency Interference (RFI)

The RFID module conforms to the following national standards defining acceptable limits for radio frequency interference (RFI).

Federal Communications Commission, Part 15

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. The equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the owner's manual instructions, can cause harmful interference to radio communications.

Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING **Per FCC rules, changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.**

Industry Canada

This device complies with RSS-210:2007 of the Spectrum Management & Telecommunications Radio Standards Specification. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

ATTENTION: Haute Tension
Débranchez avant de réparer

European Applications

CE compliance is claimed to the following directives:

- 1999/5/EC R&TTE Directive
- 2006/95/EC LVD Directive
- 2002/95/EC RoHS Directive

Directive compliance has been verified to the following standards:

- EN 55022
- EN 300 330-1 V1.5.1
- EN 300 330-2 V1.3.1
- EN 301 489-3 V1.4.1
- EN 301 489-1 V1.8.1
- EN 60950-1

Regulatory Notices for Cardiovascular Exercise Equipment

The regulatory information in this section applies to the exercise equipment and its control console.

Safety Approvals for Cardiovascular Equipment

Precor equipment has been tested and found to comply with the following applicable safety standards.

Cardiovascular Type Equipment:

- CAN/CSA, IEC, EN 60335-1 (Household and similar electrical appliances - Safety)
- EN 957 (Stationary training equipment, class S/B compliant equipment)

PVS and P80 Regulatory Notice

This Precor equipment has been tested and found to comply with the following applicable safety standards.

- CAN/CSA, UL, IEC, EN 60065 (Audio, video and similar electronic apparatus - Safety)

Radio Frequency Interference (RFI)

This Precor exercise equipment conforms to the following national standards defining acceptable limits for radio frequency interference (RFI).

Federal Communications Commission, Part 15

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. The equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the owner's manual instructions, may cause harmful interference to radio communications.

WARNING **Per FCC rules, changes or modifications not expressly approved by Precor could void the user's authority to operate the equipment.**

Industry Canada

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

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European Applications

CE compliance is claimed to the following directives:

- 2004/108/EC EMC Directive
- 2006/95/EC LVD Directive
- 2002/95/EC RoHS Directive

Directive compliance has been verified to the following standards:

- EN 55022
- EN 55024
- EN 60335-1
- EN 60065 (P80 and PVS)

Electrical Recommendations: All Equipment Excluding Treadmills

Note: This is a recommendation only. NEC (National Electric Code) guidelines or local region electric codes must be followed.

For equipment fitted with a P80 console or Personal Viewing System (PVS) screen a separate power connection is required. For a 20 amp branch circuit up to 10 screens can be connected. If the branch circuit has any other devices plugged into the circuit the number of screens must be reduced by the wattage of the other devices.

Note: The typical splitter power cords that have IEC-320 C13 and C14 plugs have a recommended maximum capacity of five screens.

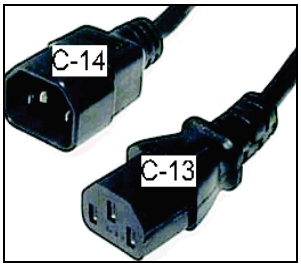

Figure 1: IEC-320 C13 and C14 plugs

Obtaining Service

Do not attempt to service the equipment except for maintenance tasks. If any items are missing, contact your dealer. For more information regarding customer support numbers or a list of Precor authorized service centers, visit the Precor web site at *http://www.precor.com*.

Obtaining Updated Documentation

Current documentation for Experience Series consoles and Preva Networked Fitness software is available at **http://www.precor.com/productmanuals**. You may want to check in for updated information from time to time as the universe of Preva features expands.

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Chapter 1

Assembling the EFX

WARNING **You will need the assistance of two other people to assemble this unit. *DO NOT attempt assembly by yourself*.**

Important: *The instructions in the following procedures are described from the perspective of a person standing* **directly in front of the equipment** *(that is, on the opposite side of the control console from a person using the equipment). These descriptions may not match the names of certain parts in the parts list, because such parts are named relative to the back of the equipment.*

To prepare the EFX for assembly:

- Open the box and assemble the components in the sequence presented in this guide.
- Assemble and operate your equipment on a hard, level surface in the area intended for use.
- Use a hand truck or furniture dolly to move the EFX unit.

  ***Important*:** *Do not grasp the unit by any of its plastic parts to move it. The plastic parts are non-structural covers and are not capable of supporting the weight of the unit.*
- Provide ample space around the unit.
- Assemble the equipment according to the guidelines in this manual to ensure that you do not void the Precor Limited Warranty.

  Important: *Any damage caused during installation is not covered by the Precor Limited Warranty.*

- Begin installation of all fasteners by hand, then partially tighten them. Do not fully tighten fasteners until instructed to do so.

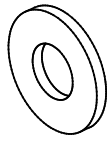
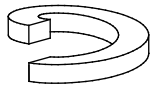
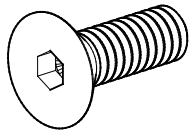
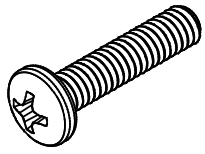
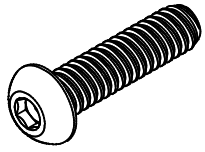
  Important: *When wrench-tightening the screws, make sure the head of the fastener is parallel to the product surface. If it is not, stop tightening to avoid cross-threading. To avoid further damage, stop assembly work and contact Customer Support.*

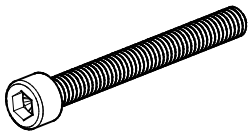
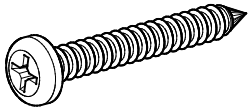
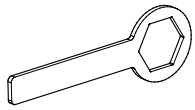
Installation Requirements

Prior to assembly, make sure you have the required tools and hardware.

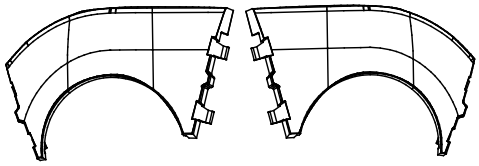
Hardware Kit (not to scale)

The hardware kit shipped with this equipment contains the fasteners and other hardware components shown in the following table. Before you begin assembly, make sure that your hardware kit is complete. If not, please contact Precor Customer Support.

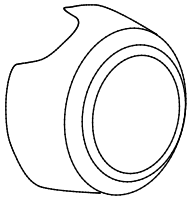
Fasteners		Quantity
	Flat washers (5⁄16-inch)	14
	Split washers (5⁄16-inch)	14
	Flat head hex drive screws (1⁄4-inch x 3⁄4-inch)	4
	Phillips-head machine screws (#8 x 3⁄4-inch)	3
	Buttonhead screws (5⁄16–inch x 1–inch)	14

Fasteners		Quantity
	Sockethead cap screws (#8 x 1½-inch)	4
	Self-tapping screws (#8 x 1½-inch)	4
	Handlebar bolt wrench	1

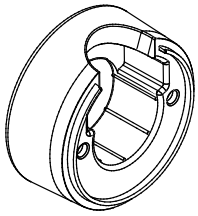
Center cross bar cap



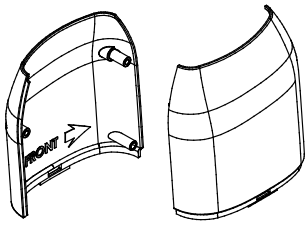
Outer handrail cap (2)



Inner handrail cap (2)



Upright support covers (right-hand and left-hand sets)



Required Tools

- #2 Phillips screwdriver
- Rubber mallet
- SAE standard hex wrench set
- SAE standard socket set
- Two 9/16-inch wrenches (open-end and box-end)
- Wire cutter

Performing the Assembly

DANGER **Do not attempt to connect electrical power until all assembly procedures are complete and the console is properly installed.**

As you assemble the EFX, make sure to construct the cable assembly as directed so that the necessary connections are accessible when you add the console.

To begin assembly:

1. Remove the lift cover and set it aside.

   ***Important*:** *Grease on the lift screw can stain clothing. Be careful not to get grease on your clothing as you remove the lift cover. Do not remove the grease from the lift screw, because it is required for proper operation.*

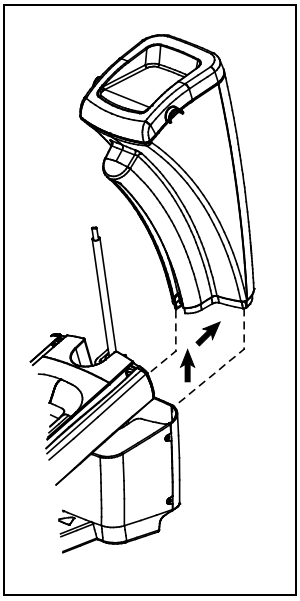


Figure 2: Lift cover removal

2. Thread the cable through the left upright support. Tape it to the top of the upright support to secure it temporarily.

   Important: *Do not stretch, crimp, or damage the cable. Cables damaged by improper installation will not be covered by the Precor Limited Warranty.*

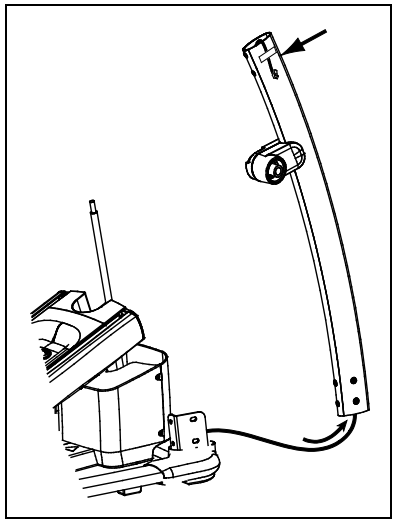


Figure 3: Route the cable

3. Attach the left upright support to the base frame using four buttonhead screws, four split washers, and four 5⁄16-inch washers. Partially tighten the fasteners.

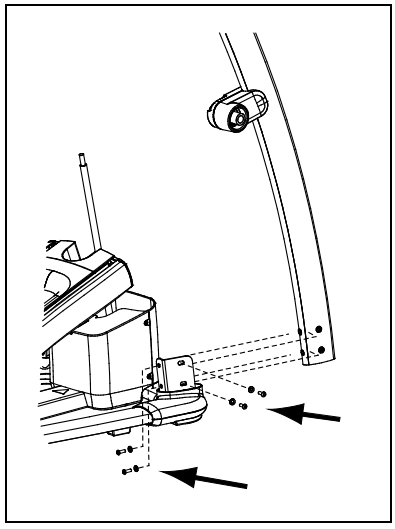


Figure 4: Attach the upright support to the base frame

4. Repeat steps 2 through 4 to attach the right upright support.

5. Using a right-angle 3⁄16" hex wrench, remove the four 1⁄4" x 3⁄4" buttonhead screws securing the central plastic base cover.
6. Remove the tape at the top of the left upright support.
7. Feed one of the cables you want to install down through the upright support, then along the inside of the foot support and back through the central frame member. The following illustration shows the general path of the cable.

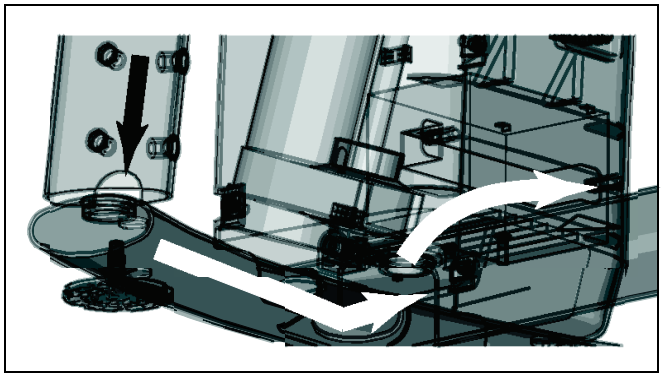


Figure 5: EFX cable path

8. Pull the end of the cable upward through the opening just behind the lift motor, as shown in the previous illustration.

9. Attach the cable to the appropriate connector inside the base of the EFX, as shown in the following illustration and table.

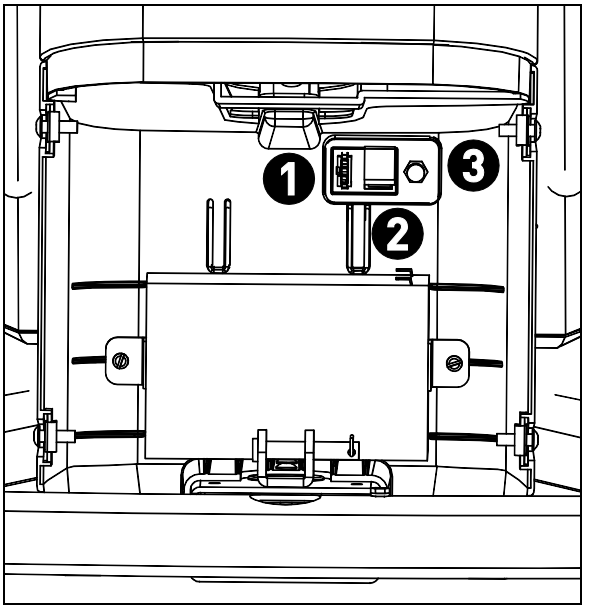


Figure 6: Cable connection points inside EFX base

Connect ...	*To ...*
The console power cable (red and black, individual leads)	The power connector on the jack panel 1
The television cable (black and round)	The coaxial connector on the jack panel 2
The Ethernet cable (black and flat)	The eight-connector modular jack on the jack panel 3

10. Repeat steps 7 through 9 for the remaining cables you want to install.
11. Replace the central plastic base cover, then attach the four buttonhead screws you removed along with the cover. Tighten the screws completely.

12. Replace the lift cover that was removed in the first step.

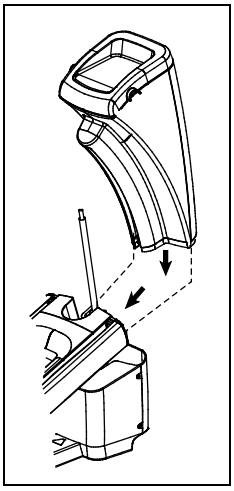


Figure 7: Lift cover replacement

To mount the center column support on the frame:

Note: Check that the base fasteners are loose before installing the fasteners for the central column support.

1. Have your assistant support the center column support while you align the inside mounting brackets with the upright supports.
2. Fasten the center column support to each upright support by threading a buttonhead screw, a 5⁄16-inch washer, and a split washer through opposite mounting holes.

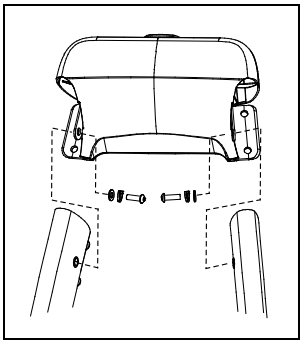


Figure 8: Rear view of console attachment

Important: *When wrench-tightening the screws, make sure the head of the fastener is parallel to the product surface. If it is not, stop tightening to avoid cross-threading. To avoid further damage, stop assembly work and contact Customer Support.*

3. Check alignments and thread the remaining four center column support screws, four 5⁄16-inch washers, and four split washers. Tighten with a 3⁄16-inch hex key so the assemblies come together, but leave room for adjustments.

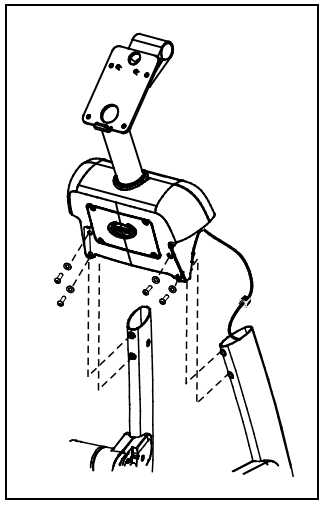


Figure 9: Attachment of center column support

To tighten the fasteners properly:

CAUTION: Upright support fasteners must be properly aligned and wrench-tightened in the order described below. If improperly assembled, the upright supports can rub against the ramp.

1. Fully tighten the two sets of fasteners on the back of the center column support.

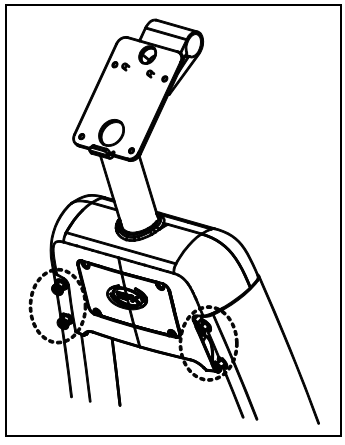


Figure 10: Fastener attachment detail

2. Fully tighten the fasteners on the back of each upright support.

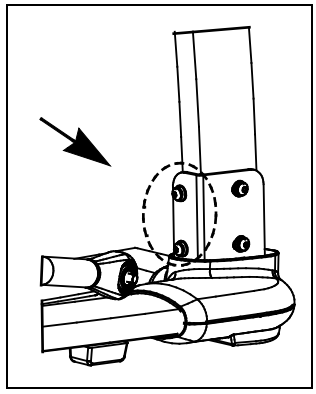


Figure 11: Tighten the back fasteners on the upright supports

3. Fully tighten the fasteners on the lower sides of each upright support.

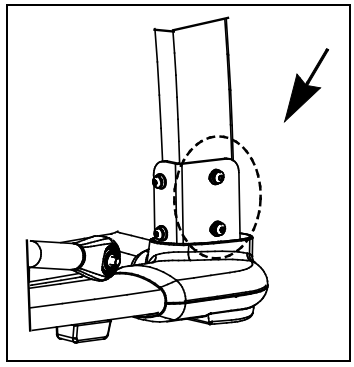


Figure 12: Tighten the front fasteners on the upright supports

4. Fully tighten the fasteners on the upper front of the center column support.

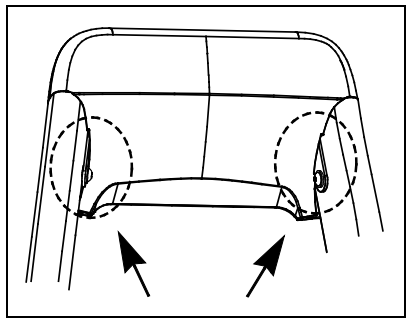


Figure 13: Tighten the front fasteners on the center column support

To attach the handlebars:

***Important*:** *Attach one handlebar at a time.*

1. Use a 3⁄16-inch hex wrench to loosen the two screws in the handlebar clamp. Refer to the following illustration for the location of these fasteners.

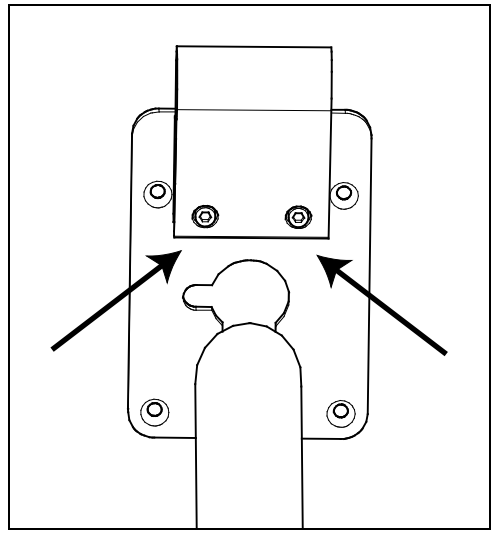


Figure 14: Clamp screw location, EFX handlebar bracket

2. Connect the heart rate cable from the console to the heart rate cable from the handlebars and place excess cable inside the handlebar.

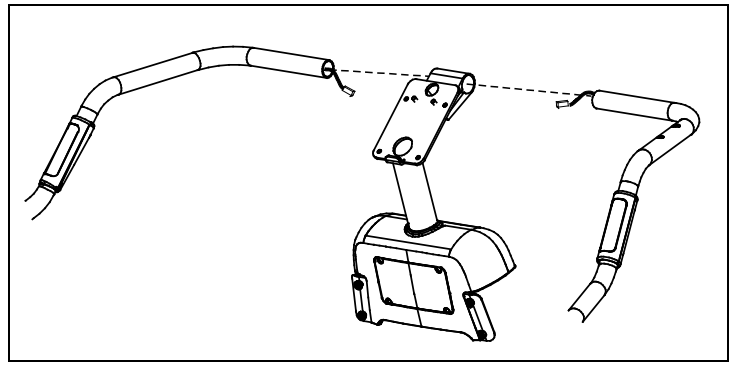


Figure 15: Threading of the heart rate cable

***Important*:** *Do not stretch, crimp, or damage the cable. Cables damaged by improper installation will not be covered by the Precor Limited Warranty.*

3. Insert the right handlebar into the handlebar clamp until the foam grip touches the side of the handlebar clamp.

4. Apply pressure to the handlebar and rotate it back and forth to ease it into the handlebar clamp.
5. Slide the inner handlebar cap onto the lower handlebar.
6. Thread one hex head screw through the handlebar and handlebar mount. Partially tighten the screw.

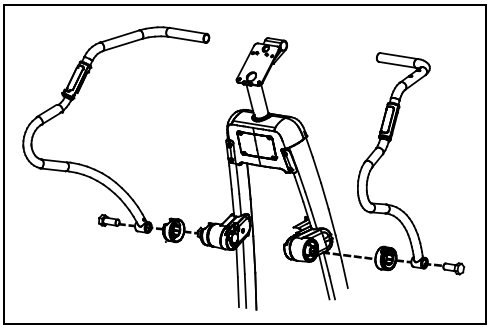


Figure 16: Handrail attachment detail

7. Repeat steps 1 through 7 to attach the opposite handlebar.

To tighten the handlebars completely:

1. Use the wrench included with the unit, or a 1⅜-inch socket, box, or open-end wrench, to tighten the handlebar screws fully.
2. Use a 3/16-inch hex wrench to tighten the two handlebar clamp fasteners fully.
3. Insert the center crossbar cap for each handlebar and press firmly into place.

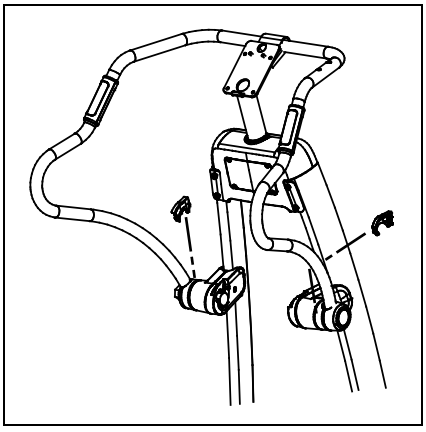


Figure 17: Center crossbar cap attachment

Note: When secure, the center crossbar caps hold the lift cover in place.

4. Attach the outer handlebar caps.

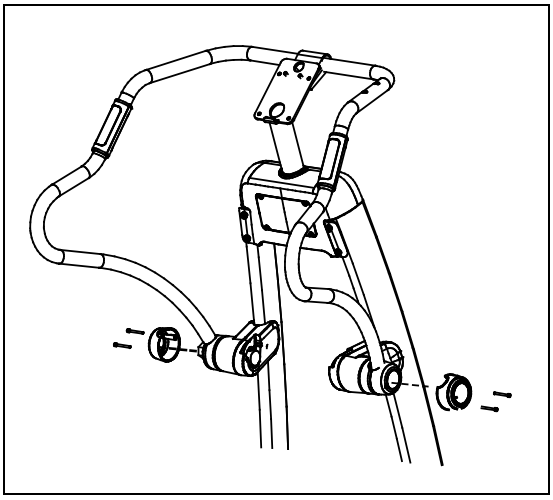


Figure 18: Outer handrail caps attachment

To attach the water bottle holder:

1. Position the water bottle holder as shown and attach it to the right stationary handlebar.

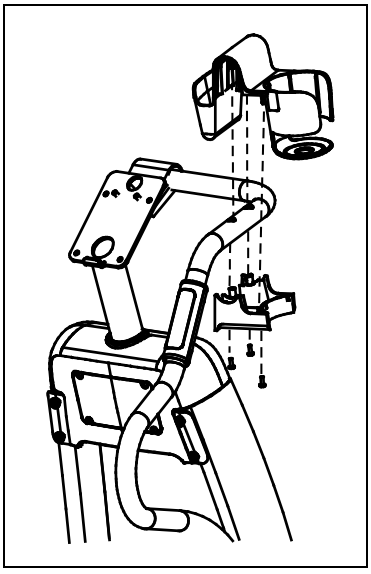


Figure 19: Water bottle attachment

2. Secure the holder using three Phillips-head screws.

To attach the upright support covers:

1. Place one inner and one outer upright support cover around one of the upright supports, aligning them so that the arrows on their inside surfaces point toward the front of the equipment.
2. Line up the protrusions on the outer cover with the screw holes on the inner cover.
3. Apply pressure to both covers so that the protrusions fit firmly into the screw holes.
4. Secure the upright support covers using two self-tapping screws.

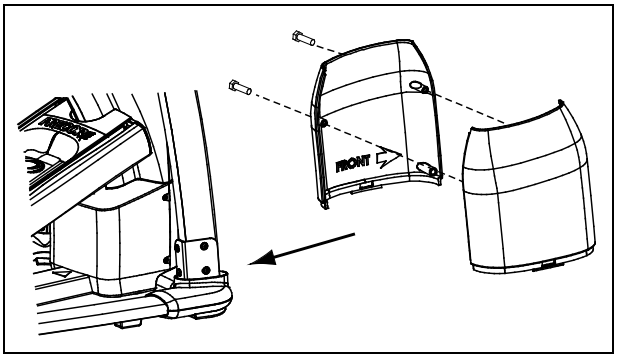


Figure 20: Upright support cover attachment (right-hand cover shown)

5. Slide the covers down and snap them into the base mount.

   Note: Be sure to align the covers so that the lip of each cover fits inside the edge of the base mount and the hook on the base mount fits into the corresponding slot on the cover. When you have snapped the covers into place, the surfaces of the covers and the base mount should line up smoothly.
6. Repeat steps 1 through 5 to attach the other pair of upright support covers.

Leveling the EFX

Make sure the unit is level before allowing anyone to use it.

CAUTION: To eliminate movement, make sure the adjustable feet are in contact with the floor.

To level the unit:

1. Gently rock the unit. If there is any movement, ask your assistant to tip the unit to one side while you locate the adjustable feet.
2. Correct the height of each adjustable foot as follows.

If you want to ...	*Then turn the adjustable feet ...*
Raise the unit	Counterclockwise
Lower the unit	Clockwise

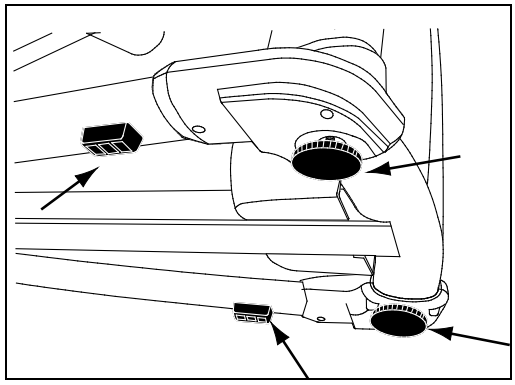


Figure 21: Rubber pad and adjustable foot locations

***Important*:** *Place the unit on a flat surface. Rotating the adjustable feet cannot compensate for extremely uneven surfaces.*

When you are finished adjusting the unit, place the unit on the floor and recheck that it is level.

Breaking in the Equipment

Precor equipment does not require an actual break-in period. However, moving components such as belts, gears, and bearings can settle while the equipment is being stored or shipped. This can cause the equipment to operate with a small amount of roughness or noise when it starts up for the first time.

The equipment usually returns to smooth operation after a day or two of normal use. If it does not, contact your dealer for assistance. For more information, refer to *Obtaining Service*.

Chapter 2

Installing the Console

To make installation easier, all Precor Experience Series consoles use the same mounting hardware and connector locations whenever possible. The installation sequence for any of them is as follows:

- Threading the cable assembly
- Connecting cables
- Completing the installation (tightening the mounting screws and attaching the back cover)

The following sections describe how to perform these tasks.

Threading the Cable Assembly (P80)

Earlier in the installation, you threaded the necessary cables through the frame of the base unit and out the passthrough opening in the console mount. As you line up the back plate on the console with the console mount, you must make sure that the cable assembly passes correctly through the openings in both components.

Important: *Before you begin the following procedure, remove the rear cover from the control console. To remove the cover, use your fingernails to pry the lower edge loose, then swing the cover up and out as shown in the following illustration.*

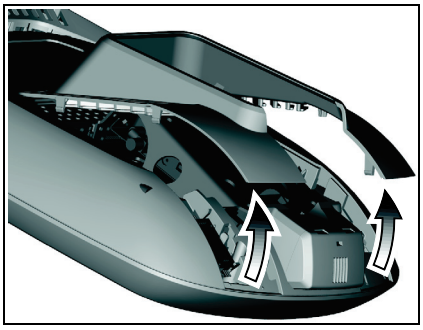


Figure 22: Removing the access cover from the P80 console

To thread the cable assembly:

1. Make sure that as much of each cable as possible passes through the opening in the middle of the console mount on the base unit.
2. Position the console over the console mount.
3. Rest the console on the console mount so that the notch on the bottom of the console's back plate rests on the rectangular hook at the bottom of the console mount, as shown in the following figure.

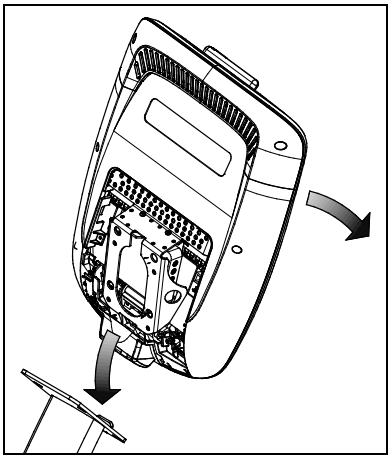


Figure 23: Console positioning on base unit

4. Tilt the console forward until it stops. Use one hand to steady the console in this position, or ask your assistant to do so.

Connecting Cables (P80)

After the console has been seated, separate the individual cables out of the end of the cable assembly and attach them to the appropriate circuit connectors inside the console. Refer to the following diagram and table to identify the cables and connectors.

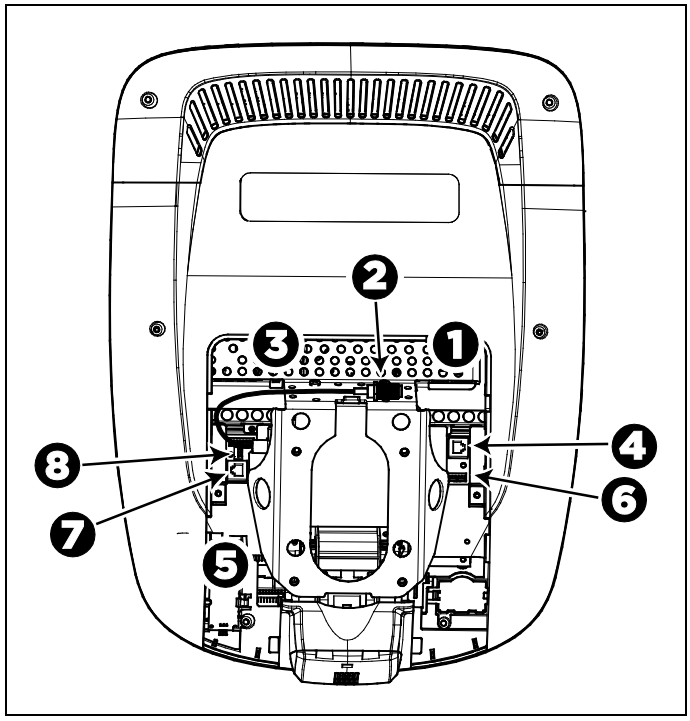


Figure 24: Cable connections, P80 console

Table 1. P80 internal cable connections

Cable	Connector Type	Circuit Connector Location
Ethernet (LAN)	Eight-contact modular, on round black cable	1
TV in	F-type coaxial	2
Power	Two-contact plug, polarized and latched	3
Data from base unit	Eight-contact modular, on flat gray cable	4

Cable	Connector Type	Circuit Connector Location
Heart rate sensors	Four-contact strip, keyed	5
Safety key (treadmills only)	Six-contact strip, keyed	6
CSAFE	Eight-contact modular, on flat gray cable	7
Auto Stop sensor (treadmills only)	Four-contact strip, keyed	8

To simplify installation and maintenance, route and connect cables 1 through 5 according to the following instructions.

Note: In the illustrations in this section, some cables are omitted for the sake of clarity.

Connecting the Television Cable

The console's television tuner is mounted inside the console's back plate. The tuner includes a short cable adapter that allows the television cable to be connected outside the back plate.

To connect the television cable:

1. Pull the cable out through the lower right corner of the back plate.
2. Route the cable counterclockwise around the outside of the back plate.
3. Attach the connector on the cable to the connector on the tuner cable and tighten the two connectors securely using two 7/16-inch open-end wrenches. Position both connectors above the upper right corner of the back plate.
4. Use a plastic tie to secure the connectors to the top of the back plate. Pass the tie through the two small holes near the upper right corner of the back plate, then wrap it around the connectors and tighten it securely. Cut off and remove the protruding end of the tie.

The following illustration shows how the cable is positioned once it is installed.

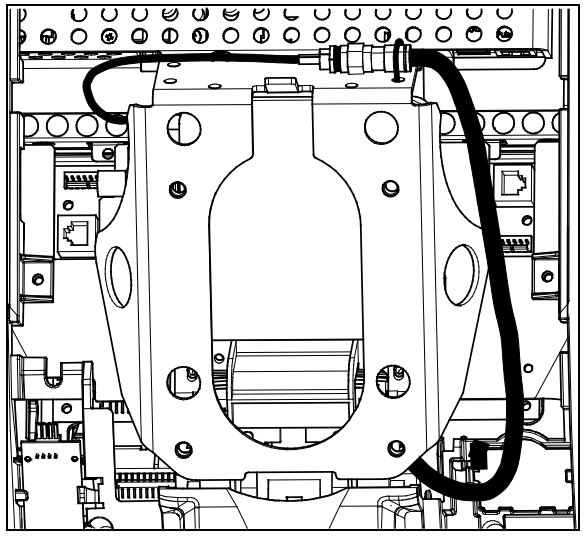


Figure 25: Connecting the television cable

Connecting the Ethernet and Base Unit Data Cables

Both the Ethernet and base unit data cables pass through the cutaway opening at the upper right corner of the back plate and connect to nearby modular jacks in the console. Because of this, it is important to exercise caution when connecting the cables. The black Ethernet cable connects to a jack just underneath the perforated metal bracket at the very top of the opening in the console. The gray base unit data cable connects to a lower jack closer to the back plate.

Refer to the following illustration for the correct position of both cables.

CAUTION: If you connect the base unit data cable to the wrong jack, the equipment will not function.

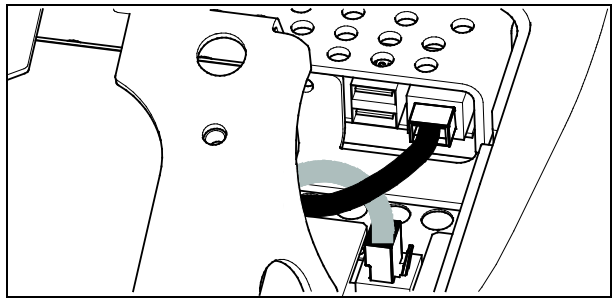


Figure 26: Connecting the Ethernet and base unit data cables

Connecting the Heart Rate Sensor Cable

The heart rate sensor cable passes through the cutaway opening at the upper left corner of the back plate, then down to the small circuit board at the lower left of the console. The following illustration shows how the cable should look once it is installed.

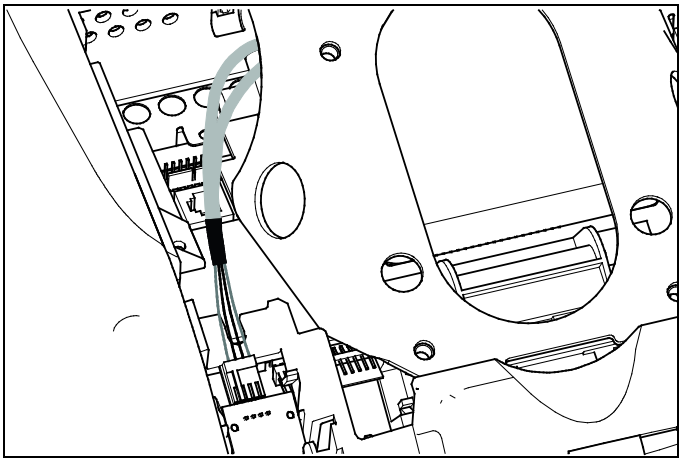


Figure 27: Connecting the heart rate cable

Connecting the Power Cable

Like the tuner, the console's upper circuit board is equipped with a cable adapter that relieves you of attempting to attach a cable to a recessed jack. To connect the power cable, route it through the cutaway opening at the upper left corner of the back plate and plug it in to this adapter.

The following illustration shows how the cable should look once it is installed.

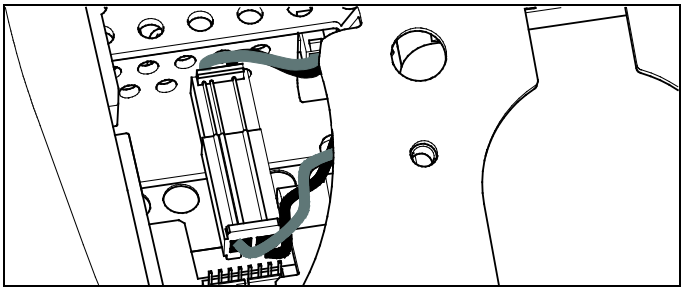


Figure 28: Connecting the power cable

Completing the Console Installation (P80)

***Important*:** *To allow enough room to attach the console's back cover, you must loosen the bracket holding the upper ends of the handlebars in place. If you do not loosen the bracket, the cover may break. Using a 3⁄16-inch hex key, loosen the two socket head cap screws in the bracket by two or three turns each.*

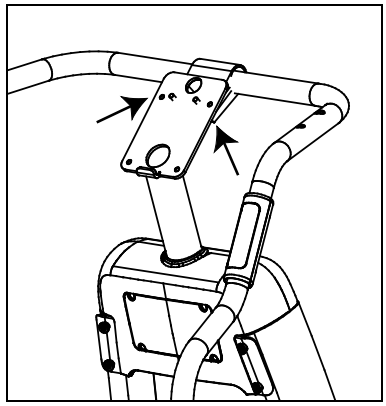


Figure 29: Location of screws on handlebar bracket

Before you complete the final installation steps, double-check the connections you have made. Make sure that all cables are fully and securely connected, and that any unneeded cables are tied back properly.

To complete the installation:

1. Feed extra cable back into the neck tube.
2. Tilt the control console backward (toward yourself) until the tab on the top edge of its back plate slides along the top edge of the console mount and the screw holes align properly.
3. Insert the four 5⁄8-inch flat head screws through the holes in the console mount and thread them into the holes in the back plate on the console. Partially tighten the screws using a 5⁄8-inch hex wrench.
4. Line up the two small tabs at the top of the console's back cover with the slots at the top of the opening in the console case. Insert the tabs into the slots.
5. Insert the remaining tabs on the back cover with the corresponding slots on the console case.
6. Press gently on the edges of the back cover to snap it into place.
7. Using a 3⁄16-inch hex key, fully retighten the two socket head cap screws securing the handlebar bracket.

Threading the Cable Assembly (P30)

Earlier in the installation, you threaded the necessary cables through the frame of the base unit and out the passthrough opening in the console mount. As you line up the back plate on the console with the console mount, you must make sure that the cable assembly passes correctly through the openings in both components.

Important: *Before you begin the following procedure, remove the rear cover from the control console. Set the cover and its mounting hardware aside for later use.*

To thread the cable assembly:

1. Make sure that as much of each cable as possible passes through the opening in the middle of the console mount on the base unit.
2. Position the console over the console mount.
3. Rest the console on the console mount so that the notch on the bottom of the console's back plate rests on the rectangular hook at the bottom of the console mount, as shown in the following figure.

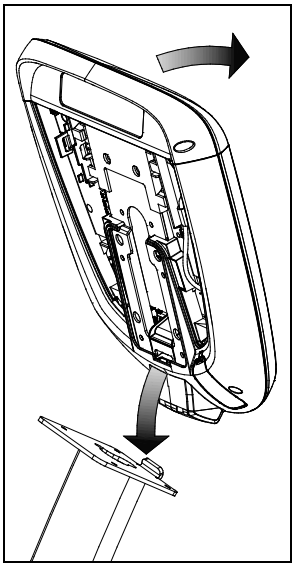


Figure 30: Console positioning on base unit

4. Tilt the console forward until it stops. Use one hand to steady the console in this position, or ask your assistant to do so.
5. Pull all cables upward and forward until you can drape them over the top of the console's back plate.

Connecting Cables (P30)

After the console has been seated, separate the individual cables out of the end of the cable assembly and attach them to the appropriate circuit connectors inside the console. Refer to the following diagram and table to identify the cables and connectors.

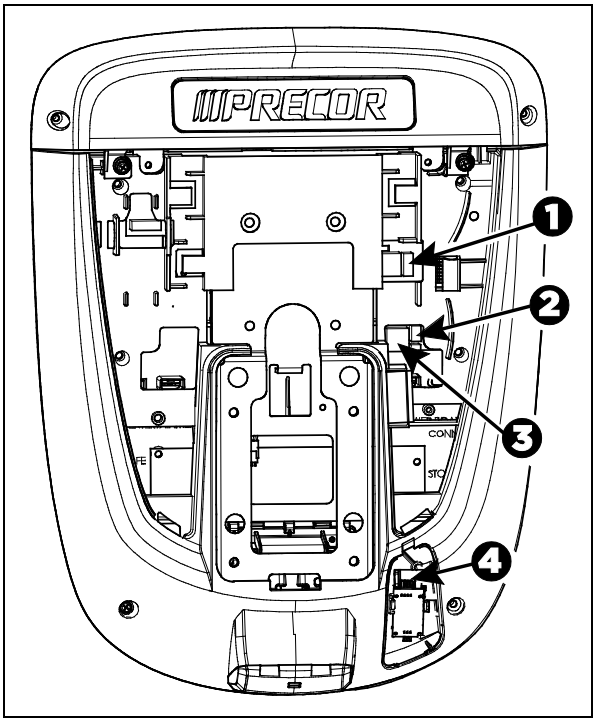


Figure 31: Cable connections, P30 console

Table 2. P30 internal cable connections

Cable	Connector Type	Circuit Connector Location
Safety key (treadmills only)	Six-contact strip, keyed	1
Auto Stop sensor (treadmills only)	Four-contact strip, keyed	2
Data from base unit	Eight-contact modular, on flat gray cable	3
Heart rate sensors	Four-contact strip, keyed	4

Completing the Console Installation (P30)

Before you complete the final installation steps, double-check the connections you have made. Make sure that all cables are fully and securely connected, and that any unneeded cables are tied back properly.

To complete the installation:

1. Feed extra cable back into the neck tube.
2. Tilt the control console backward (toward yourself) until the tab on the top edge of its back plate slides along the top edge of the console mount and the screw holes align properly.
3. Insert the four ⅝-inch flat head screws through the holes in the console mount and thread them into the holes in the back plate on the console. Partially tighten the screws using a ⅝-inch hex wrench.
4. Line up the two small tabs at the bottom of the console's back cover with the slots at the bottom of the console case. Insert the tabs into the slots.
5. Insert the two #8–32 x ½-inch Phillips-head screws that you removed earlier into the holes at the top edge of the console's back cover. Tighten the screws fully.

   ***Important**: Use caution not to pinch the cables between the back cover and PVS mounting screw heads.*
6. Fully tighten the four mounting screws (partially tightened in step 3) using a ⅝₂-inch hex wrench.

Verifying That the Heart Rate Display Is Operational

To verify that the heart rate display is operational:

1. Begin exercising on the equipment.
2. Grasp both touch-sensitive handlebars.

   Note: The heart rate is read within ten seconds. During that time, the heart on the display flashes.
3. Look at the HEART RATE display. After a few seconds, a number appears indicating your heart rate.
4. If a number does not appear in the HEART RATE display, check the cable connection to make sure it is properly connected.

Chapter 3

Maintenance

To keep the equipment functioning properly, perform the minor maintenance tasks in this section at the intervals shown on the maintenance checklist. Failure to maintain the equipment as described in this section could void the Precor Limited Warranty.

DANGER **To reduce the risk of electrical shock, always disconnect the equipment from its power source before cleaning it or performing any maintenance tasks. If the equipment is self-powered but also uses the optional power adapter, disconnect the adapter.**

Daily Cleaning

Precor recommends that you clean the equipment before and after each exercise session. To remove dust and dirt from the equipment, wipe all exposed surfaces with a soft cloth that you have moistened with one of the following cleaners:

- A solution of 30 parts of water to 1 part of Simple Green® (for more information, visit **www.simplegreen.com**)
- ENVIR-O-SAFE oxygen enhanced cleaner or multi-task cleaner concentrate, diluted according to the manufacturer's instructions (for more information, visit **www.daleyinternational.com**)

Alternatively, you can clean the equipment with Athletix fitness equipment cleaning wipes (for more information, visit **www.athletixproducts.com**)

CAUTION: Read and follow the manufacturer's instructions, particularly dilution instructions, before using any cleaner on Precor fitness equipment. Do not use concentrated cleaners at full strength, or acidic cleaners of any kind; such cleaners weaken the protective finish on the equipment and void the Precor Limited Warranty. Never pour water or spray liquids onto any part of the equipment. Allow the equipment to dry completely before using.

Vacuum the floor underneath the equipment frequently to prevent the accumulation of dust and dirt that can interfere with its operation. Use a soft nylon scrub brush to clean the grooves on equipment with foot pedals.

Daily Inspection

At least once every day, examine the equipment for the following problems:

- Slipping belts
- Loose fasteners
- Unusual noises
- Worn or frayed power cords
- Any other indication that the equipment may be in need of service

Important: *If you determine that the equipment needs service, disconnect all power connections (television, Ethernet, and power) and move the equipment away from the exercise area. Place an OUT OF SERVICE sign on the equipment and make it clear to all patrons and other users that they must not use it.*

To order parts or to contact a Precor authorized service provider in your area, refer to *Obtaining Service*.

Weekly Maintenance

Perform the following maintenance tasks every week:

1. Disconnect the external power supply.
2. Clean the ramps and wheels with water or an approved cleaner.
3. Inspect the power cord to verify that it is not pinched under the equipment or between any two moving parts.
4. Clean the floor under the equipment using a vacuum cleaner or a damp mop.
5. When the floor is completely dry, reconnect the power.
6. Test all console functions, including heart rate monitoring features.
7. Verify that the unit sits squarely on the floor. All of its feet should be touching the floor and the unit should not rock or wobble when in use. If not, re-level it as described in *Leveling the EFX*.

Monthly Maintenance

DANGER **USE EXTREME CAUTION when the rear cover of any EFX is removed. Serious injury could result if fingers are pinched between the flywheel spokes, cranks, movable arms, and the drive weldment. Securing the movable arm to the crank with a clamp is recommended. Be aware of other people within your work area who might cause the arm to move.**

Perform the following maintenance tasks every month:

1. Clean the frame, cover and arms with water or an approved cleaner.
2. Wipe the exterior of the console with a damp sponge or soft cloth, and dry with a clean towel. Keep water away from electronic components to prevent electrical shock or damage.
3. Clean the touchscreen using a soft, lint-free cloth dampened with a 91% isopropyl alcohol solution (either as sold or diluted with an equal amount of water).
4. Remove the rear cover. Vacuum out any debris, being careful not to bring the vacuum cleaner nozzle too close to any circuit board (unless your vacuum cleaner is protected against static buildup).
5. Check the belt tension of the step-up and drive belts.

6. Clean and lubricate the lift motor screw with an approved grease such as SuperLube® with Teflon® or Mobil 1® synthetic grease (adjustable-ramp models only).
7. Check all fasteners for proper tightness and torque.
8. Replace all covers.
9. Verify that the unit sits squarely on the floor. All of its feet should be touching the floor and the unit should not rock or wobble when in use. If not, re-level it as described in *Leveling the EFX*.

Storing the Chest Strap

If you purchased the optional heart rate chest strap, store it in a place where it remains free of dust and dirt (for example, in a closet or drawer). Be sure to protect the chest strap from extremes in temperature. Do not store it in a place that may be exposed to temperatures below 32° F (0° C).

To clean the chest strap, use a sponge or soft cloth dampened in mild soap and water. Dry the surface thoroughly with a clean towel.

Moving the Equipment

The equipment is very heavy. If you plan to move it to a new location, obtain the help of an adult assistant and use proper lifting techniques. If the equipment includes roller wheels on one end, use the wheels to reduce the load on yourself and your assistant.

We recommend a four-wheeled dolly to move Elliptical Fitness Crosstrainers.

Long-Term Storage

If you do not expect anyone to use the equipment for a long time, perform the following tasks to prepare it for storage:

- If it has a power cord, disconnect the cord.
- If it has an optional power adapter, connect the adapter to prevent damage to the internal battery.
- Position it so that it will not become damaged and will not interfere with people or other equipment.

Chapter 4

Self-Powered Features

Important: *This chapter of the manual describes Precor fitness equipment that can operate without being connected to AC power. This includes units equipped with P40 or P20 consoles. However, P80 consoles must be connected to AC power through their power supplies to operate. For this reason, this chapter does not apply to units equipped with P80 consoles.*

On self-powered equipment, the system initializes and displays the Welcome screen when a user starts exercising. A minimum rate of motion must be maintained for the banner to appear, as shown in the following table. When a person meets the requirements, the power that is generated allows the equipment to function properly.

Table 3. Minimum requirements for operation

Equipment	Rate of Motion
AMT	56 strides per minute (SPM)
EFX	40 strides per minute (SPM)
Climber	30 steps per minute
Bike	20 revolutions per minute (RPM)

Informational displays appear when the battery is low or when the rate of motion drops below the minimum requirements. The display explains what to do to retain power. If the messages are ignored, the equipment begins shutdown procedures to maintain the charge of the battery. Refer to *Informational Displays Prior to Shutdown*.

An optional power adapter can be purchased and provides sustained power to the equipment. If you plan to change the club settings, the power adapter is highly recommended. To purchase the optional power adapter, check with your dealer. Refer to *Obtaining Service*.

Informational Displays Prior to Shutdown

The equipment saves its battery charge by moving into a shutdown mode. If the user does not maintain the minimum rate of motion, a 30-second shutdown process begins.

In this mode, the console displays a countdown indicator and ignores all keypresses. If no movement is detected or the rate of motion remains below the minimum, the indicator changes as the countdown continues.

Note: The user can resume exercising before the countdown period elapses and the program will continue from the point at which it was paused.

Important: *If the equipment is connected to a CSAFE master device, it follows a slightly different shutdown process. Ten seconds before the equipment shuts down, it ends the exercise session and displays a reset message while it disconnects from the CSAFE master device. It ignores all keypresses during these last ten seconds.*

Symptoms of a Low Battery

If no one has used the equipment for an extended period of time, the battery may need recharging.

Symptoms of a low battery include the following:

- A flickering or erratic display
- Loss of user and program information after the user stops exercising, without any display of a workout summary or a notification of pending shutdown

Important: *To maintain a constant power source, use the optional power adapter.*

Using the Optional Power Adapter

After connecting the power adapter to the equipment, plug the opposite end into the appropriate power source (120 V or 240 V).

CAUTION: When the optional power adapter is in use, make sure that the power supply cord does not create a safety hazard. Keep it out of the way of traffic and moving parts. If the power supply cord or power conversion module is damaged, it must be replaced.

The control console functions differently when the power adapter is connected. Because the power adapter provides a constant source of power, a user can pause for brief periods without initiating shutdown procedures. When the pause time limit expires and the user has not resumed exercising, the console returns to the Welcome screen. The default pause time is 30 seconds for all fitness equipment. Refer to the manual for your control console for instructions on setting or changing the pause time limit. To learn how to install the power adapter, refer to *The Optional Power Adapter Kit*.

The Optional Power Adapter Kit

If you purchase the optional power adapter, you must also purchase the internal cable kit. The kit supplies the cable, bracket, and fasteners that connect the power adapter to the lower electronics board.

CAUTION: The internal cable kit must be installed by authorized service personnel. Do not attempt installation on your own as you could void the Precor Limited Warranty. For more information, refer to *Obtaining Service*.

***Important*:** *If this equipment includes a P80 console, the optional power adapter and the internal cable kit must still be installed to provide continuous power to the base unit and support its internal battery.*

Once the internal cable kit is installed, you can plug the optional power adapter into the equipment. Plug the opposite end into the appropriate power source for your equipment (120 V or 240 V). Review the safety instructions found at the beginning of this manual before using the power adapter.

Replacing the Battery

The equipment's battery is built to last for a long time. However, if you feel that the battery may need replacing, check with an authorized service technician. Refer to *Obtaining Service*.

CAUTION: The battery stored inside the equipment contains hazardous materials and must be disposed of according to Hazardous Waste Regulations. Refer to *Hazardous Materials and Proper Disposal*.

Chapter 5

Commercial Cardiovascular Equipment Limited Warranty

PLEASE READ THESE WARRANTY TERMS AND CONDITIONS CAREFULLY BEFORE USING YOUR PRECOR INCORPORATED PRODUCT. BY USING THE EQUIPMENT, YOU ARE CONSENTING TO BE BOUND BY THE FOLLOWING WARRANTY TERMS AND CONDITIONS.

Limited Warranty.

Precor Incorporated warrants all new Precor products to be free from defects in materials and manufacture for the warranty periods set forth below. The warranty periods commence on the invoice date of the original purchase. This warranty applies only against defects discovered within the warranty period and extends only to the original purchaser of the product. Parts repaired or replaced under the terms of this warranty will be warranted for the remainder of the original warranty period only. To claim under this warranty, the buyer must notify Precor or your authorized Precor dealer within 30 days after the date of discovery of any nonconformity and make the affected product available for inspection by Precor or its service representative. Precor's obligations under this warranty are limited as set forth below.

Warranty Periods and Coverage.

All Commercial Cardiovascular Products (excluding StretchTrainer, Strength Products, and coverage specific to certain models and options as defined below):

- Frame: 7 years
- Treadmill drive motor: 5 years
- Items subject to wear: 1 year
- All other parts (including mechanical parts and electronic parts): 2 years
- Labor: 1 year

880 Line Commercial Cardiovascular Products (superseding the coverage above where applicable):

- Labor on the P80 console: 2 years
- High wear items on the P80 console, including headphone jack, USB connector, and iPod® connector: 90 days

Options / Accessories

Many options or accessories have components that are connected internally or mounted inside the electronic console. The following guidelines determine the warranty for these components. If the internal components are installed by the factory or by an authorized dealer as part of the original sale and delivery, they have a warranty that is identical to the warranty of the equipment in which they are connected or mounted. If the internal components are not installed by the factory or by an authorized dealer as part of the original sale and delivery, they have a 90 days parts and labor limited warranty. All components that are not internally connected have a 90 days parts only limited warranty. Satisfactory proof of purchase is required in all cases.

Conditions and Restrictions.

This warranty is valid only in accordance with the conditions set forth below:

1. The warranty applies to the Precor product only while
   a. it remains in the possession of the original purchaser and proof of purchase is demonstrated.
   b. it has not been subjected to accident, misuse, abuse, improper service, or non-Precor modification.
   c. claims are made within the warranty period.
2. This warranty does not cover damage or equipment failure caused by electrical wiring not in compliance with electrical codes or Precor owner's manual specifications, or failure to provide reasonable and necessary maintenance as outlined in the owner's manual.
3. Precor is not responsible for Internet connectivity to its products. This restriction applies to services, such as those provided by an Internet service provider (ISP), and also to hardware related to Internet connectivity, such as Ethernet cabling, routers, servers and switches.
4. Precor is not responsible for the quality of television, video, audio, or other media supplied to its products. This restriction applies to services, such as those provided by a cable or satellite television provider; to signal strength and clarity; and also to hardware related to the reception and delivery of television, video, audio, and other media. Such hardware can include (but is not limited to) audio, video, and radio-frequency (RF) cabling, connectors, receivers, modulators, combiners, distribution amplifiers, splitters, and so on.
5. Precor cannot guarantee that the heart rate measurement system on its products will work for all users. Heart rate measurement accuracy varies based on a number of factors, including the user's physiology and age, the method in which the heart rate measurement system is used, external interference, and other factors that may influence heart rate acquisition.
6. Except in Canada, Precor does not pay labor outside the United States.
7. Warranties outside the United States and Canada may vary. Please contact your local Dealer for details.

This Limited Warranty shall not apply to:

1. Software version upgrades.
2. Software defects that do not materially and negatively affect the normal performance of the product under normal conditions of use.
3. Consumable goods or cosmetic items of the product, the exterior of which has been damaged or defaced as a result of abuse, misuse, accident, improper service or installation, mishandling, or modification in design or construction not authorized by Precor.
4. Repairs performed on Precor equipment missing a serial number or with a serial tag that has been altered or defaced.
5. Service calls to correct installation of the equipment or instruct owners on how to use the equipment.
6. Pickup and delivery involved with repairs.
7. Any labor costs incurred beyond the applicable labor warranty period.

Disclaimer and Release.

The warranties provided herein are the exclusive warranties given by Precor and supersede any prior, contrary or additional representations, whether oral or written. ANY IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE THAT APPLY TO ANY PARTS DESCRIBED ABOVE ARE LIMITED IN DURATION TO THE PERIODS OF EXPRESS WARRANTIES GIVEN ABOVE FOR THOSE SAME PARTS. PRECOR HEREBY DISCLAIMS AND EXCLUDES THOSE WARRANTIES THEREAFTER. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. PRECOR ALSO HEREBY DISCLAIMS AND EXCLUDES ALL OTHER OBLIGATIONS OR LIABILITIES, EXPRESS OR IMPLIED, ARISING BY LAW OR OTHERWISE, WITH RESPECT TO ANY NONCONFORMANCE OR DEFECT IN ANY PRODUCT, INCLUDING BUT NOT LIMITED TO: (A) ANY OBLIGATION, LIABILITY, RIGHT, CLAIM OR REMEDY IN TORT, WHETHER OR NOT ARISING FROM THE NEGLIGENCE OF PRECOR OR ITS SUPPLIERS (WHETHER ACTIVE, PASSIVE OR IMPUTED); AND (B) ANY OBLIGATION, LIABILITY, RIGHT, CLAIM OR REMEDY FOR LOSS OF OR DAMAGE TO ANY EQUIPMENT. This disclaimer and release shall apply even if the express warranty set forth above fails of its essential purpose.

Exclusive Remedies.

For any product described above that fails to conform to its warranty, Precor will provide, at their option, one of the following: (1) repair; (2) replacement; or (3) refund of the purchase price. Precor Limited Warranty service may be obtained by contacting the authorized dealer from whom you purchased the item. Precor compensates Servicers for warranty trips within their normal service area to repair commercial equipment at the customer's location. You may be charged a trip charge outside the service area. THESE SHALL BE THE SOLE AND EXCLUSIVE REMEDIES OF THE BUYER FOR ANY BREACH OF WARRANTY.

EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES.

PRECOR AND/OR ITS SUPPLIERS SHALL HAVE NO OBLIGATION OR LIABILITY, WHETHER ARISING IN CONTRACT (INCLUDING WARRANTY), TORT (INCLUDING ACTIVE, PASSIVE, OR IMPUTED NEGLIGENCE AND STRICT LIABILITY), OR OTHERWISE, FOR DAMAGE TO THE EQUIPMENT, PROPERTY DAMAGE, LOSS OF USE, REVENUE OR PROFIT, COST OF CAPITAL, COST OF SUBSTITUTE EQUIPMENT, ADDITIONAL COSTS INCURRED BY BUYER (BY WAY OF CORRECTION OR OTHERWISE) OR ANY OTHER INCIDENTAL, SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM NONDELIVERY OR FROM THE USE, MISUSE OR INABILITY TO USE THE PRODUCT. This exclusion applies even if the above warranty fails of its essential purposes and regardless of whether such damages are sought for breach of warranty, breach of contract, negligence, or strict liability in tort or under any other legal theory. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Complete this portion and keep for your records.

Purchased From: _____

Example: Dealer or store name.

Phone Number: _____

Example: Dealer or store telephone number.

Product/model: _____

Example: AMT 885 or EFX 883.

Serial number: _____

The serial number is found on the shipping container.

Effective 1 November 2010
P/N 36286-114

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EFX 883/833 PAG/OM 300712-301 rev F
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